

# NATIONAL CHP TURBINE TECHNOLOGY AND REGULATORY FORUM: PROMOTING INNOVATION

Sheraton Four Points Hotel, San Diego, California March 5-6, 2003

#### WEDNESDAY, MARCH 5TH

12:00 pm Registration (Lunch on your own)

1:00 pm Welcome and Introductions

- Luis Troche, United States Environmental Protection Agency (EPA)
- Irene Stillings, Executive Director, San Diego Regional Energy Office
- Greg Barr, Vice President, Solar Turbines

1:25 pm EPA CHP Partnership - Mission, Progress to Date, Why We Are Here

· Luis Troche, EPA

1:40 pm Deploying CHP in California and the Nation

Scott Tomashefsky, Advisor to the Chairman, California Energy Commission

2:00 pm Gas Turbines - Technology Update

- Technology Basics, Rainer Kurz, Manager of System Analysis and Field Tests, Solar Turbines
- Combustion and Fuels, Luke Cowell, Manager of Combustion Product Development, Solar Turbines
- Alternative Combustion Technologies, Dennis Moss, Business Development Manager, Kawasaki
  Moderator: Leslie Witherspoon, Manager, Environmental Affairs, Solar Turbines
  This session will present the latest in turbine and combustion technologies. The audience will gain an
  understanding of performance and emissions and learn about various techniques that engineers and
  researchers are using to lower emissions.

3:15 pm Break

3:30 pm CHP Applications

- Capstone, Andrew Wang, CHP Applications Manager
- Ingersoll-Rand, Robert Mack, Director of Marketing and Business Development, Ingersoll-Rand Energy Systems
- Kawasaki, Dennis Moss, Business Development Manager
- Solar Turbines, Chris Lyons, Manager, Power Generation Solutions

Moderator: Merrill Smith, Distributed Energy and Electric Reliability Program (DEER), United States Department of Energy (DOE)

This session will cover current applications for gas turbines in CHP modes. Manufacturers will discuss where they have applied their technology and the energy and environmental benefits of these applications.

5:15 pm Reception Sponsored by Solar Turbines



### THURSDAY, MARCH 6<sup>™</sup>

6:30 am Continental Breakfast

7:30 am Depart for Solar Turbines Plant Tour

10:00 am Return from Plant Tour

10:15 am Environmental Regulations and Legislative Developments Affecting CHP

- Update on Current Issues and Activities
  - New Source Review Reform of December 2002, Racqueline Shelton, Office of Air Quality, Planning and Standards, EPA
    - Implemented December 2002: NSR Applicability Test, Plant-Wide Applicability Limit (PAL); Pollution Prevention; Clean Unit Designation
    - Upcoming Proposals: Routine Maintenance, Follow-up to CHP Guidance
  - Maximum Achievable Control Technology (MACT), Racqueline Shelton, Office of Air Quality, Planning and Standards, EPA
  - Clear Skies Initiative, Mary Jo Krolewski, Clean Air Markets Division, EPA

Panelists will discuss current federal regulations that are affecting or could affect the CHP industry. The New Source Review Reform action, taken in December, will be discussed, as well as the President's Clear Skies Initiative. The impact of MACT regulations on the gas turbine industry will also be discussed.

#### 12:00 pm Luncheon

#### 1:00 pm Innovative Approaches to Regulations Affecting CHP

• Best Practices in Output-Based Emission Standards, Luis Troche, EPA, and Joel Bluestein, President, Energy and Environmental Analysis

This session will present a primer on output-based approaches to emissions limits. A draft report of EPA's Review of State-Level Output-Based Emissions Standards and the Regulatory Assistance Project (RAP) model will be presented. An update on current state experiences with these standards will also be presented.

#### 2:30 pm Break

#### 

- Texas, Jim Linville, Texas Commission on Environmental Quality
- California, Grant Chin, California Air Resources Board (Invited)
- New York, Rob Sliwinski, New York Department of Environmental Conservation
- Massachusetts, Nancy Seidman, Massachusetts Department of Environmental Protection (Invited)
- A CHP Partner's Perspective

Moderator: Tom Canaday, CHP Liaison, EPA Region 9

State representatives will talk about their experiences developing and implementing Output-Based Emissions Standards. This will provide a framework for other regulators considering or developing output-based regulations. An EPA CHP Partner will present his/her experience in installing a CHP system in an output-based regulatory environment.

#### 4:30 pm Concluding Remarks

Irene Stillings, Executive Director, San Diego Regional Energy Office

#### 5:00 pm Adjourn

• Richard Brent, Solar Turbines

## Agenda